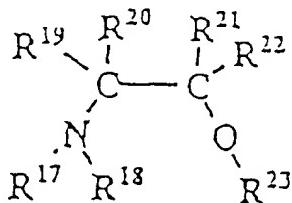
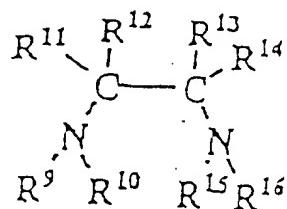


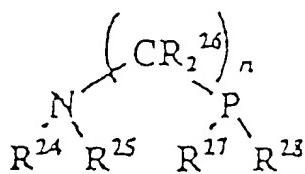
Amendments to the Claims

1-12. (Cancelled)

13. (Currently amended) An optically active catalyst composed of a transition metal catalyst and an optically active amine derivative represented by any one of the following formulas; formulas:



or



(wherein wherein R^9 , R^{10} , R^{15} and R^{16} are independently hydrogen, a

saturated or unsaturated hydrocarbon group, urethane group or sulfonyl group; R¹¹, R¹², R¹³ and R¹⁴ are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center and independently represent hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; any one of R¹¹ and R¹² and any one of R¹³ and R¹⁴ are bonded together to form a ring;

at least one of R¹⁷ and R¹⁸ is hydrogen atom, and the remaining one is hydrogen atom, a saturated or unsaturated hydrocarbon group, urethane group or sulfonyl group; R¹⁹, R²⁰, R²¹ and R²² are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center and independently represent hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; R²³ represents hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; furthermore, any one of R¹⁹ and R²⁰ and any one of R²¹ and R²² may satisfactorily be bonded together to form a ring or any one of R¹⁷ and R¹⁸ and any one of R²⁰ and R²¹ may satisfactorily be bonded together to form a ring;

R²⁴ and R²⁵ are independently hydrogen atom, a saturated or unsaturated hydrocarbon group, urethane group, sulfonyl group or acyl group; (CR₂)_n are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center; R²⁶ represents hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; R²⁷ and R²⁸ independently represent hydrogen atom, and or a saturated or unsaturated hydrocarbon group.

14. (Currently amended) A catalyst according to claim 13, wherein the transition metal complex catalyst is a complex of metals of group VIII as represented by the following general formula; formula:

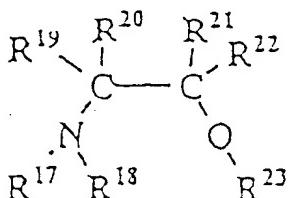
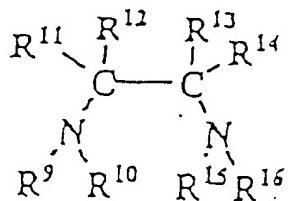


(wherein wherein M represents transition metals of group VIII, such as selected from the group consisting of iron, cobalt, nickel, ruthenium, rhodium, iridium, osmium, palladium and platinum; X

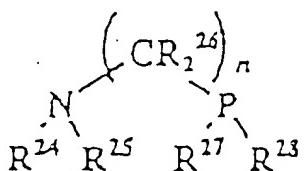
represents hydrogen, halogen atom, carboxyl group, hydroxy group and or alkoxy group and the like;

L represents neutral ligands such as selected from the group consisting of aromatic compounds and olefin compounds; and m and n represent an integer) integer.

15. (Currently amended) An optically active catalyst composed of a transition metal catalyst and an optically active amine derivative represented by any one of the following formulas; formulas:



or



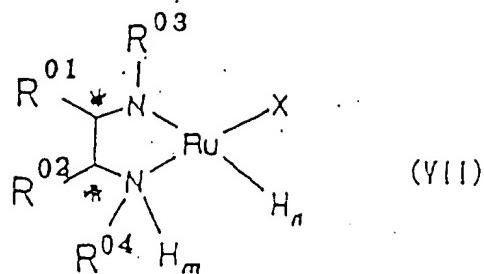
(wherein wherein R⁹, R¹⁰, R¹⁵ and R¹⁶ are independently hydrogen, a saturated or unsaturated hydrocarbon group, urethane group or sulfonyl group; R¹¹, R¹², R¹³ and R¹⁴ are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center and independently represent hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; any one of R¹¹ and R¹² and any one of R¹³ and R¹⁴ are bonded together to form a ring;

at least one of R¹⁷ and R¹⁸ is hydrogen atom, and the remaining one is hydrogen atom, a saturated or unsaturated hydrocarbon group, urethane group or sulfonyl group; R¹⁹, R²⁰, R²¹ and R²² are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center and independently represent hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; R²³ represents hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; furthermore, any one of R¹⁹ and R²⁰ and any one of R²¹ and R²² may satisfactorily be bonded together to form a ring or any one of R¹⁷ and R¹⁸ and any one of R²⁰ and R²¹ may satisfactorily be bonded together to form a ring;

R²⁴ and R²⁵ are independently hydrogen atom, a saturated or unsaturated hydrocarbon group, urethane group, sulfonyl group or acyl group; (CR₂)_n²⁶ are the same or different so that the carbon bonded with these substituent groups might occupy the asymmetric center; R²⁶ represents hydrogen atom, an aromatic group, a saturated or unsaturated hydrocarbon group or cyclic hydrocarbon group; furthermore, R²⁷ and R²⁸ independently represent hydrogen atom, and or a saturated or unsaturated hydrocarbon group.

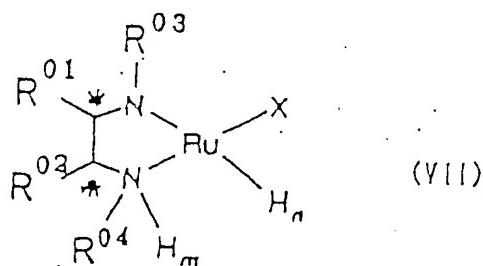
16. (Currently amended) A catalyst according to claim 15, wherein the transition metal complex catalyst is a complex of metals of group VIII.

17. (Currently amended) An optically active catalyst according to claim 16, wherein the transition metal catalyst is an optically active ruthenium-diamine complex represented by the following general formula (VII); (VIII):



(wherein * represents an asymmetric carbon atom; R⁰¹ and R⁰² are the same or different, independently representing alkyl group, or phenyl group or cycloalkyl group which may or may not have be substituted with an alkyl group; or R⁰¹ and R⁰² together form an alicyclic ring unsubstituted or substituted with an alkyl group; R⁰³ represents methanesulfonyl group, trifluoromethanesulfonyl group, naphthylsulfonyl group, camphor sulfonyl group, or benzenesulfonyl group which may or may not be substituted with an alkyl group, an alkoxy group or halogen atom, or benzoyl group which may or may not be substituted with alkoxy carbonyl group or alkyl group; R⁰⁴ represents hydrogen atom or alkyl group; X represents an aromatic compound which may or may not be substituted with an alkyl group; and m and n together represent 0 or $\neq 1$.

18. (Currently amended) An optically active ruthenium-diamine complex, represented by the following general formula (VII); VII:

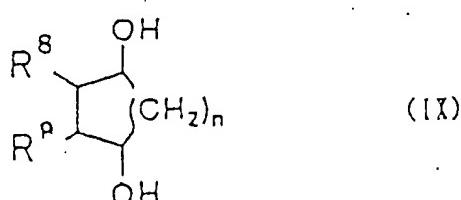


(wherein wherein * represents an asymmetric carbon atom; R⁰¹ and R⁰² and R⁰³ are the same or different, independently representing alkyl group, or phenyl group or cycloalkyl group which may or may not have be substituted with an alkyl group; or R⁰¹ and R⁰² together form an alicyclic ring unsubstituted or substituted with an alkyl group; R⁰³ represents methanesulfonyl group, trifluoromethanesulfonyl group, naphthylsulfonyl group, camphor sulfonyl group, or benzenesulfonyl group which may or may not be substituted with an alkyl group, an alkoxy group or halogen atom, or benzoyl group which may or may not be substituted with alkoxy carbonyl group or alkyl group; R⁰⁴ represents hydrogen atom or alkyl group; X represents an aromatic compound which may or may not be substituted with an alkyl group; and m and n together represent 0 or \pm 1.

19. (Original) An optically active ruthenium-diamine complex according to claim 18, wherein R⁰¹ and R⁰² are independently phenyl group or together form an alicyclic ring, unsubstituted or substituted with an alkyl group.

20. (Withdrawn) A method for producing optically active secondary alcohols, comprising subjecting racemic secondary alcohols or meso-type diols to hydrogen transfer reaction in the presence of an optically active ruthenium-diamine complex catalyst according to claim 17.

21. (Currently amended) A method according to claim 20, comprising the reaction of racemic secondary alcohols or meso-type diols represented by the following formulas (VIII) and (IX); (IX):



(wherein wherein R⁶ represents an aromatic monocyclic or polycyclic hydrocarbon group, unsubstituted or substituted or a hetero monocyclic or polycyclic group containing hetero atoms, or ferrocenyl group; R⁷ represents hydrogen atom, a saturated or unsaturated hydrocarbon group, or a functional group containing hetero atoms; or R⁶ and R⁷ may be bonded together to form a saturated or unsaturated alicyclic group giving having a cyclic ketone and the alicyclic group may or may not be substituted;

R⁸ and R⁹ furthermore independently represent a saturated or unsaturated hydrocarbon group which may or may not have a substituent, or R⁷ and R⁹ may be bonded together to form a saturated or unsaturated alicyclic group which may or may not have a substituent; and n is 1 or 2)

2.